REMARKS

Claims 1, 19 and 20 are amended. Claims 12 and 13 are canceled. Claims 14-18 and 21-22 are withdrawn from further consideration. Thus, claims 1-11 and 19-20 are pending in this application.

Claim Rejections Under 35 USC §102

Claims 1-11 and 19-20 were rejected under 35 U.S.C. 102(e) as being anticipated by *Chu et al.*, US Patent No. 6,718,376 ("Chu"). The final Office action indicated on page 2, remark 2, that "the features on which the applicant relies (i.e., multi-tiered system, complexity) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims."

Accordingly, claims 1, 19 and 20 are amended to more clearly point out the multi-tiered and more complex dependency linkages of the present application. Support for these amendments may be found, for example, in the specification at 10:22 – 12:19 and Figures 3A, 3B, 4A and 4B.

Additionally, claims 1, 19 and 20 are amended to specify that the dynamic service consistency and reference files refer to service components of an operating system of a computer. Support for these amendments may be found, for instance, in the specification at 8:8-9:2 and Figure 2.

Chu is generally directed to providing management and maintenance to nodes within a data communications network. In Chu, a host 14 has a network control console (NCC) 12 in communication with an access database adapter 20 that publishes events corresponding to services on other nodes 28 within the data communications network 10 using an information bus 22 (Chu 3:43-4:16). A control adapter 30 on the node 28 may receive the events and may proxy service adapters 32 on node 28 to perform corresponding operations such as starting and stopping services on the node 28 (Chu, 7:15-59).

With regard to amended claim 1, Applicants respectfully submit that Chu does not disclose each and every element of amended claim 1. For example, amended claim 1 discloses "a reference file in the operating system containing entries to identify the predefined service components of the operating system of the computer." Chu's service components are not service components **of the operating system**. Chu teaches toward

service components within a distributed computer network (Chu 1:10-15) such as protocol

gateway service 34, authentication, authorization and accounting service 36, a domain name

system service 38, a dynamic host configuration protocol service 40 and a cache service 42

(Chu 5:22-25). No mention of service components of an operating system appear to be found

in Chu. Chu clearly teaches towards service components in a distributed network, and does

not teach, suggest or disclose service components **of an operating system**, as recited by

amended claim 1.

Furthermore, Chu does not appear to teach, suggest or disclose

> … a reference file in the operating system containing entries to
> identify the predefined service components of the operating
> system of the computer, wherein:
>
> the predefined service component entries are linked in the
> reference file according to their dependency, the reference file
> comprising a second representation in any one from the group
> of a tree, a graph, a linked list, or a table; and
>
> the linking for each predefined service component entry in the
> reference file indicates a first predefined reference service
> component from which each predefined service component
> depends, and the linking indicates a second predefined
> reference service component that depends on the each
> predefined service component, the each predefined service
> component corresponding to the each predefined service
> component entry

as recited in amended claim 1. The final Office action relied on Chu 6:5-28 as

disclosing a reference file (final Office action, page 3). Chu 6:5-28 describes a control

adapter 30 polling services on the node 28 to determine if they are operational, and the

control adapter 30 being responsible for starting and stopping a service. Although "a

reference file" is not explicitly named in Chu 6:5-28, Applicants surmise that the final Office

action is assuming that a reference file is available and inherently described for use by the

control adapter to know which services to poll on its node. In Chu, a control adapter is

always responsible for starting and stopping a service on the node. Each service thus depends

from only the control adapter, a simple one-tiered dependency.

Chu, however, does not appear to teach, disclose or suggest a reference file containing

a "linking for each currently available predefined service component entry… indicat[ing] a

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second currently available service component that depends on the each currently available

predefined service component," as recited in amended claim 1. In the present application, as

recited by amended claim 1, the dependencies are not limited to services depending from

only one control adapter. A service component of the present application may have both

parent and child dependencies. Dependencies may be multi-tier and more complex than Chu.

For instance, in Figure 4A, both *services* and *svchost 1* must be created and running in order

for *svchost2* to start. *svchost2* - and therefore, by dependency, both *services* and *svchost1* -

must be created and running in order for *lsass* to start. Other complex dependency examples

are illustrated in Figure 4a and in the table format of Figs. 3A and 3B. The nature of

dependency management may be multi-tiered and in some cases, cross-tiered. It is much

more complex in the pending application than the simple one-tiered dependency, as described

by Chu.

> Moreover, Chu does not appear to teach, suggest or disclose
>
> > maintaining a dynamic service consistency file in the operating
> > system containing entries to identify predefined service
> > components that are currently available in the operating system
> > of the computer, wherein:
> >
> > the currently available predefined service component entries
> > are linked according to their dependency, the dynamic service
> > consistency file comprising a first representation in any one
> > from the group of a tree, a graph, a linked list, or a table; and
> >
> > the linking for each currently available predefined service
> > component entry indicates a first currently available service
> > component from which each currently available predefined
> > service component depends, and the linking indicates a second
> > currently available service component that depends on the each
> > currently available predefined service component, the each
> > currently available predefined service component
> > corresponding to the each currently available predefined
> > service component entry

as recited by amended claim 1. The final Office action relied on Chu 6:5-28 and

7:16-67 as disclosing a dynamic service consistency file (final Office action, page 3).

Applicants submit that said passages do not teach, suggest or disclose "a dynamic service

consistency file." Chu 6:5-28 does not describe a dynamic service consistency file, or any

file for that matter. Said passage describes the control adapter using a polling mechanism to

insure services remain operational (Chu 6:11-13). Said passage does not disclose any file
that contains dynamic service information.

Chu 7:24-30 discloses a configure file that records a preexisting configuration upon
initial startup of a control adapter or a service adapter. The configure file includes GUIDs,
port configuration, engine and facility data (Chu 7:26-30); no mention of dynamic service
information or any type of service information is mentioned. Chu 7:31-67 continues
discussing what happens when events are received at the control adapter, but no dynamic
service consistency file, or any file for that matter, is mentioned. Furthermore, no mention of
a child dependency, or "the linking indicat[ing] a second currently available service
component that depends on the each currently available predefined service component, the
each currently available predefined service component corresponding to the each currently
available predefined service component entry" appears to be found in Chu.

Regarding the element of amended claim 1 "determining whether an inconsistency
exists between service component entries within the dynamic service consistency file and the
reference file," the final Office action again cited to Chu 6:5-28. As previously discussed, no
file appears to be taught or disclosed in Chu 6:5-28. Again, even if Applicants surmise that
the final Office action assumes that a reference file is suggested by said passage and used by
the control adapter to know which services to poll, Applicants do not find a disclosure,
teaching or suggestion of a second file that may be construed as the dynamic service
consistency file, nor do Applicants find a disclosure, teaching or suggestion of determining
whether an inconsistency exists between the two files. Chu 6:5-28 determines the operational
existence of a service by a polling process, and not by comparing two files.

The MPEP §2131 clearly states: "TO ANTICIPATE A CLAIM, THE REFERENCE
MUST TEACH EVERY ELEMENT OF THE CLAIM 'A claim is anticipated only if each
and every element as set forth in the claim is found, either expressly or inherently described,
in a single prior art reference.' *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628,
631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).... 'The identical invention must be shown in as
complete detail as is contained in the ... claim.' *Richardson v. Suzuki Motor Co.*, 868 F.2d
The final Office action stated on page 3 that "Chu detects whether a service that normally is
operational has failed – an inconsistency. The detection of services that are operational and
services that should be operational are inherently maintained in "files." Applicants

respectfully assert that the allegedly inherent description of "files" is an assumption of probability or possibility made by the final Office action and is not inherently described in Chu 6:5-28 for at least the following reasons.

Chu 6:5-28 is clear that the detection of services that are operational is performed by a polling mechanism used by the control adapter. Knowing which services to poll at a given time may require a first inherent list or file of services on the node such as Chu's configuration file in Chu 7:24-26. A second file, or one construed to be a "dynamic service consistency file," however, is not explicitly recited (let alone shown in complete detail as in amended claim 1) and is not inherently described in Chu 6:5-28. The MPEP states in Section 2112, item IV that the "EXAMINER MUST PROVIDE RATIONALE OR EVIDENCE TENDING TO SHOW INHERENCY

> The fact that a certain result or characteristic <u>may</u> occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' ...."In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic <u>necessarily</u> flows from the teachings of the applied prior art." *Ex parte Levy,* 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original)

One of ordinary skill in the art may easily come up with several other mechanisms for use with the material of Chu that do not require a second file in order to perform polling, for example, a flag in the (first) configuration file itself to mark whether or not a service is operational, or the use of sequential polling messages for each service in the configuration file without maintaining operational status of each service in memory at all. The assumption made by the final Office action that a "file" is present is only one of several possibilities in

Chu 6:5-28. The final Office action has not provided "a basis in fact and/or technical reasons to reasonably support the determination" that a second "dynamic service consistency file" as recited in amended claim 1 "<u>necessarily</u> flows from the teachings of" Chu 6:5-28. Accordingly, a second "dynamic service consistency file" is neither explicitly nor inherently described in Chu 6:5-28.

The present application provides benefit over Chu by providing a more sophisticated, resource efficient technique for managing more complex, parent and child dependencies. Chu's technique for discovering non-operational network services consists of having the control adapter poll each service on a prescribed time basis (Chu, col. 6, lines 10-13, col. 9, lines 38-42, col. 10, lines 29-31). Chu, col. 9, lines 38-40 describes the process as "the control adapter … constantly polling the service adapter to insure that the service adapter is functional." The control adapter dialogues constantly with each service adapter to ensure live operation of that service adapter. Chu's technique suffices for the simple one-tiered dependency environment.

Using Chu's technique in the complex dependency environment of the pending application, however, would be unwieldy and produce a large volume of message traffic and performance issues resulting from the constant polling of the multiple tiers and dependent services. Moreover, Chu does not provide a technique for managing both parent and child dependencies. The present application provides methods and techniques that allow management of complex dependencies and that may address resource and other problems associated with using Chu's simpler method of polling for operational status.

For the above reasons and for additional reasons, Applicants respectfully submit that amended claim 1 is not anticipated by Chu under 35 §USC 102(e). Claims 2-3, 5, 7, 9-11 depend from amended claim 1. Claim 4 depends from claim 3, claim 6 depends from claim 5, and claim 8 depends from claim 7. As a dependent claim incorporates each and every element of the claim from which it depends, Applicants submit that for reasons similar to amended claim 1 and for additional reasons, dependent claims 2-11 are also not anticipated by Chu under 35 §USC 102(e).

Independent claims 19 and 20 are amended similar to amended claim 1. Applicants submit that for reasons similar to amended claim 1 and for additional reasons, amended 19 and 20 are also not anticipated by Chu under 35 §USC 102(e).

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CONCLUSION

In view of the above amendment and arguments, Applicants submit the pending application is in condition for allowance and an early action so indicating is respectfully requested.

The Commissioner is authorized to charge any fee deficiency required by this paper, or credit any overpayment, to Deposit Account No. 13-2855, under Order No. 30835/303495, from which the undersigned is authorized to draw.

Dated: May 5, 2008   Respectfully submitted,

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